## State Preserves Advisory Board and the Iowa Department of Natural Resources March 9, 2009

### **Request for Research and Inventory Proposals for State Preserves**

The State Preserves Advisory Board and the Iowa Department of Natural Resources are soliciting proposals for inventory, management, and research projects on state preserves. Proposals will be considered for biological, archaeological, geological, or historical inventories, management activities, and other research for the state preserves program. Currently we hope to have a total of about \$30,000 to fund several projects.

Funding is dependent on state appropriations that will be determined during the 2009 Legislative Session. The State Preserves Advisory Board and the DNR will not know if funds are available until early June. The Preserves Advisory Board will select projects at the April board meeting, contingent upon funding availability.

Examples of topics for proposed projects are inventories of flora and fauna, conducting or coordinating management activities, Phase I archaeological surveys, research of management issues, geomorphic studies, interpretation of preserves, or other innovative ideas. The following sections list potential projects but should not be considered as the only projects that will be considered for funding. Applicants may propose to study one or more of the suggested sites. Proposals for other preserves and other topics will also be entertained.

#### ARCHAEOLOGICAL STUDIES

*Preserves that need Phase I archaeological surveys include:* 

Preserve	County
Eureka Woods (90 acres)	Greene
Anderson Prairie (200 acres)*	Emmet

<sup>\*</sup> Due to the large number of acres in this preserve, proposals that cover a portion of the preserve will be considered.

#### MANAGEMENT ACTIVITIES

Assist preserve managers by conducting or coordinating brush control, prescribed burns, and invasive species control projects. Projects that provide long-term solutions to management problems will be given priority.

#### **BIOLOGICAL STUDIES**

Biological Preserves are in need of conservation assessments to document and protect the faunal and/or floral composition of the preserve. Principally, the conservation assessment consists of a comprehensive species inventory, with maps indicating major vegetation/faunal communities, and the particular spatial distribution of species of conservation concern. Rare or endangered species, species that are found outside of their known range, and species of particular cultural value (for example large, open-grown oak trees) may be singled out for spatial data.

Conservation assessments are encouraged to include observations on population change over time and potential threats due to invasive species, successional changes, changes to faunal habitat, etc.

We encourage the use of GPS/GIS technology to document findings.

Preserves that need fauna surveys include:

Preserve	County	Survey	Habitat
Hoffman Prairie (36 acres)	Cerro Gordo	Butterflies	Prairie
Clay Prairie (3 acres)	Butler	Butterflies	Prairie
Catfish Creek (600 acres)	Dubuque	Birds	Forest
Fallen Rock (122 acres)	Hardin	Birds	Forest
Mann Wilderness (103 acres)	Hardin	Birds	Forest
Mericle Woods (132 acres)	Tama	Birds	Forest
Liska-Stanek Prairie (20 acres)	Webster	Butterflies	Prairie
Turin Loess Hills (220 acres)	Monona	Birds	Prairie and forest

*Preserves that need surveys of flora include:* 

Preserve	County	Predominant vegetation
Cameron Woods (36 acres)	Scott	Forest
Cold Water Spring (60 acres)*	Winneshiek	Forest
Vincent Bluff (31 acres)	Pottawattamie	Prairie and forest
Fossil and Prairie Park (292 acres)	Floyd	Prairie, forest, wetland
Perkins Prairie (30 acres)	Greene	Prairie
Ocheyedan Mound (24 acres)	Osceola	Prairie
Pellett Woods (20 acres)	Cass	Forest

**Note:** Surveys for preserves flagged with an asterisk (\*) could be proposed to include adjacent public areas. Preserves flagged with "#" require special access arrangements across private property or refuge; contact John Pearson <u>John.Pearson@dnr.iowa.gov</u>; 515/281-3891) for details.

#### **GEOLOGICAL STUDIES**

The Preserves Board is also seeking proposals that will directly benefit one or more State Preserves designated wholly or in part as "geological." The greatest need is for information that completes a thorough geologic inventory of a preserve, contributes to its interpretation or related materials, or improves its management guidelines. While basic geology of many preserves is understood in a general sense, specifics are lacking in many cases, and interpretive material for the public is lacking for most sites.

An inventory would include a basic field investigation and prepared summary of the geologic content of the preserve. This would require compiling all existing geologic data as well as the acquisition of new data required to achieve a level of understanding that explains both the principal geologic setting of the preserve and its notable features. The assembled document might include a cross-section, stratigraphic column, geologic and topographic maps, fossil illustrations, photographs, and a discussion of the regional geologic history. The report should be written so as to be adaptable to presentation on the WWW, to publications such as the State Preserves Guide, to interpretive material prepared under the Board's direction, and to use by the preserve managers. Behrens Ponds and Woodland and Cedar Bluffs are examples of preserves that need geological studies.

Inventories of potential geological preserves are also potential projects. An inventory of glacial erratic fields is an example of work that needs to be completed.

Proposals will also be considered for the preparation of interpretive materials that will benefit public understanding of preserves with a geological designation, especially those that are frequently visited or associated with a permanent, staffed facility. Starr's Cave, Ft. Atkinson, Catfish Creek, Pilot Knob, Brushy Creek, and Cedar Hills Sand Prairie are examples.

Research projects that focus on management concerns and guidelines may deal with the geologic or hydrologic aspects of a preserve. Such investigations could include erosional or sedimentation patterns that are altering a preserve, or hydrologic processes that are essential to sustaining a preserve's integrity, including the extent of groundwater recharge areas and vulnerability to groundwater contamination. These would apply particularly to the fen, spring, algific slope, cave, and ice cave preserves.

#### APPLICATION PROCEDURE

Proposals should include 1) a technical proposal containing a description of the objectives and methods of the proposed study, including how the proposed project will benefit the Preserves System, 2) a resume of the qualifications of project personnel, and 3) a cost proposal indicating labor costs (number of hours times hourly rate for various personnel), materials to be purchased for the research, and travel expenses (lodging, mileage, and meals).

The final report for research and inventory projects shall follow journal format and include the following:

- Abstract
- Introduction
- Methods
- Results
- Discussion (including management implications, if applicable)
- Literature Cited

# Archaeological studies shall follow the "Guidelines for Archaeological Investigations in Iowa."

Proposals will be evaluated according to the following criteria (total of 30 points):

- 1. (10 points) <u>Benefit of proposed project to state preserve system.</u> Higher scores will be assigned to proposals which provide information pertinent to the management of individual preserves, contribute to solving management problems that affect several preserves, aid in identifying potential preserves, yield information which can be used to improve the protection and management of preserves, or improve management of one or more preserves.
- 2. (10 points) <u>Feasibility of proposed project</u>. Are the goals and objectives of the proposed project clearly stated and achievable? Is the requested funding commensurate with the effort required? Are the personnel qualified to perform the study?
- **3.** (10 points) <u>Soundness of methodology</u>. Are the methods suited to the goals and objectives? Will the proposed project have unacceptable impacts to the study sites? Are the number, size, and distribution of samples or observations sufficient? Are the analytical methods appropriate? Are the management techniques appropriate?

Based on the above scoring criteria and numerical scores the board members will rank the proposals as high (1), medium (2), or low (3) priority for funding. The ranking numbers for each proposal will be totaled and divided by the number of scorers. Proposals with the lowest numbers will be funded until the available funds are expended.

Twelve copies of each proposal must be delivered to the below listed office by 4:00 p.m. April 24, 2009. It is anticipated that winning proposals will be selected in April and (if funds are appropriated) the contracts will start after July 1, 2009. These contracts will expire on June 30, 2010. All fieldwork must be completed and all reports submitted by that date.

**Submit proposals to:** Daryl Howell

Iowa Department of Natural Resources

Wallace State Office Building Des Moines, Iowa 50319-0034

Phone (515) 281-8524 FAX (515) 281-6794

Email Daryl.Howell@dnr.iowa.gov